

# Science Toolkit: Grade 7 Objective 3.C.1.a

Student Handout: Science: Grade 7 Objective 3.C.1.a

Standard 3.0 Life Science

Topic C. Genetics

Indicator 1. Explain the ways that genetic information is passed from parent to offspring in different organisms.

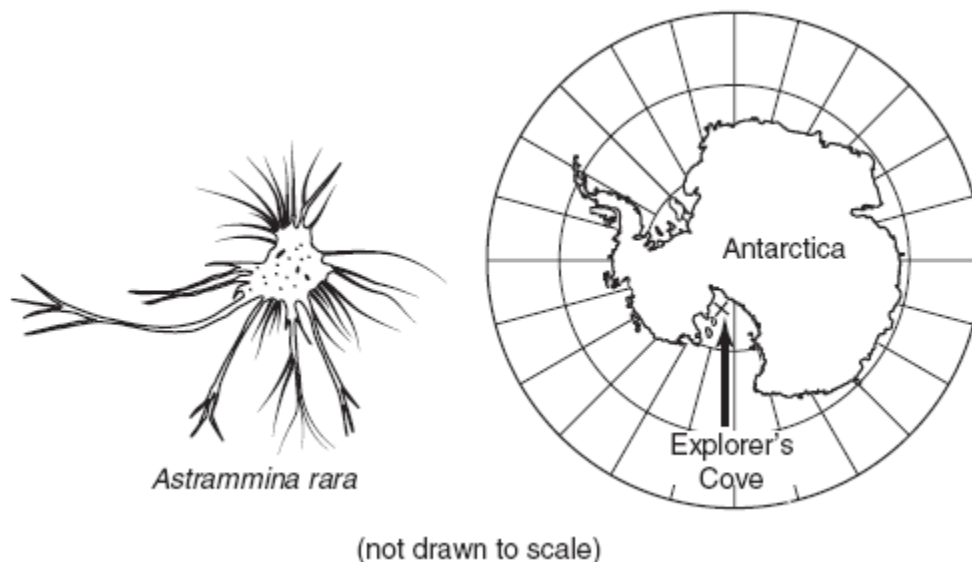
Objective a. Investigate and explain that in some kinds of organisms, all the genes come from a single parent, whereas in organisms that have sexes, typically half of the genes come from each parent.

Selected Response (SR) Item

Question

Use the information and diagrams below to answer the following.

*Astrammina rara* is a unicellular organism that is several millimeters long. This organism lives on the ocean floor of Antarctica in an area called Explorer's Cove. *Astrammina rara* builds a shell by cementing grains of sand from the ocean floor together. The organism either absorbs nutrients from the water or eats other organisms on the ocean floor. The offspring of *Astrammina rara* have genes identical to the parent. Below is a diagram of an *Astrammina rara* and a map showing where the organism lives.



Which statement best describes how genetic information is passed to the offspring of *Astrammina rara*?

- A. The genetic information comes from the egg.
- B. The genetic information comes from the sperm.
- C. All of the genetic information comes from one parent.
- D. Half of the genetic information comes from one parent.

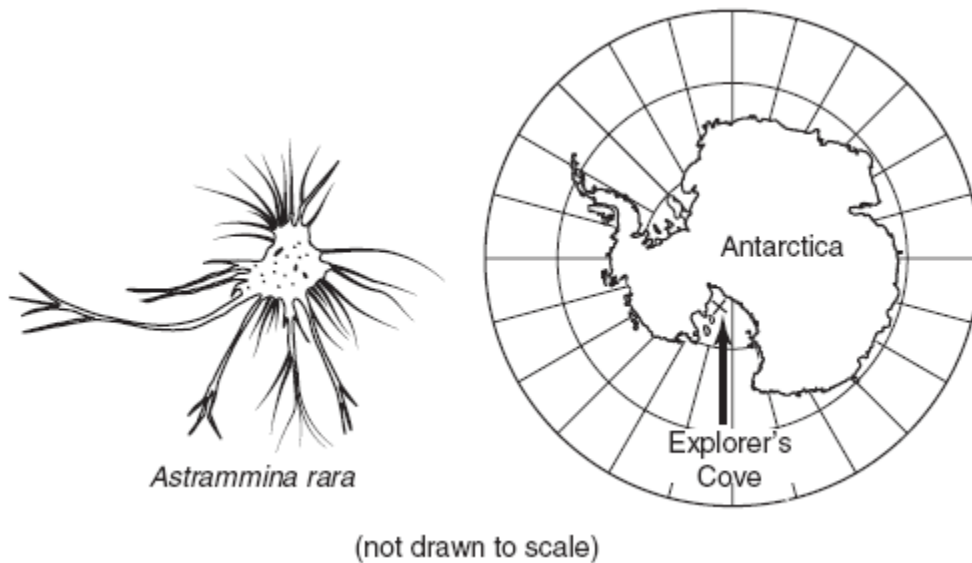
Correct Answer

C. All of the genetic information comes from one parent.

## Question

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Which statement best describes how genetic information is passed to the offspring of *Astrammia rara*?

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